

ERROR CORRELATION FOR MOBILE NETWORKS

ABSTRACT OF THE INVENTION

Alternate methods, devices and systems are presented for providing service providers and/or end users of mobile stations to monitor and/or report regions with high error rates and/or dead zones. A protocol is provided such as to yield the error occurrence, error rate and/or the address of the end user. In some embodiments it also contains location information and time of day information. This information may be collected from the G.P.S., and/or all or a portion of users when there is a significant transmission difficulty and/or an abundance of errors. The collected data forms a database which is analyzed to generate coverage maps. This may include the dynamic aspects of the mobile network. In another aspect of this invention, each mobile station periodically compares its current location with the data base. The results of this comparison enables the mobile unit to anticipate connection problems. In still another aspect of the invention, the comparison is performed by the service provider which notifies the end user.